SEQUENCE LISTING

<110> FUSO PHARMACEUTICAL INDUSTRIES, LTD.

<120> Novel Collectin

<130> 99P147WO

<150> JP 10-237611

<151> 1998-08-24

<160> 29

<210> 1

<211> 2024

<212> DNA

<213> Homo Sapiens

<220>

<221> CDS

<222> (670)..(1695)

<400> 1

gtcacgaatc tgcagcaaga taccagcgtg ctccagggca atctgcagaa ccaaatgtat 60

tctcataatg tggtcatcat gaacctcaac aacctgaacc tgacccaggt gcagcagagg 120

aacctcatca cgaatctgca gcggtctgtg gatgacacaa gccaggctat ccagcgaatc 180

aagaacgact ttcaaaatct gcagcaggtt tttcttcaag ccaagaagga cacggattgg 240

ctgaaggaga aagtgcagag cttgcagacg ctggctgcca acaactctgc gttggccaaa 300

gccaacaacg acaccctgga ggatatgaac agccagctca actcattcac aggtcagatg 360

gagaacatca ccactatctc tcaagccaac gagcagaacc tgaaagacct gcaggactta 420

cacaaagatg cagagaatag aacagccatc aagttcaacc aactggagga acgctccag 480

ctctttgaga cggatattgt gaacatcatt agcaatatca gttacacagc ccaccacctg 540

cggacgctga ccagcaatct aaatgaagtc aggaccactt gcacagatac ccttaccaaa 600

cacacagatg atctgacctc cttgaataat accctggcca acatccgttt ggattctgtt 660

tctctcagg atg caa caa gat ttg atg agg tcg agg tta gac act gaa gta 711

Met Gln Gln Asp Leu Met Arg Ser Arg Leu Asp Thr Glu Val

1 5 10

gcc aac tta tca gtg att atg gaa gaa atg aag cta gta gac tcc aag 759

Ala Asn Leu Ser Val Ile Met Glu Glu Met Lys Leu Val Asp Ser Lys

15 20 25 30

cat ggt cag ctc atc aag aat ttt aca ata cta caa ggt cca ccg ggc 807

His Gly Gln Leu Ile Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly

35 40 45

ccc agg ggt cca aga ggt gac aga gga tcc cag gga ccc cct ggc cca 855

Pro Arg Gly Pro Arg Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro

50 55 60

act ggc aac aag gga cag aaa gga gag aag ggg gag cct gga cca cct 903

Thr Gly Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro

65 70 75

ggc cct gcg ggt gag aga ggc cca att gga cca gct ggt ccc ccc gga 951

Gly Pro Ala Gly Glu Arg Gly Pro Ile Gly Pro Ala Gly Pro Pro Gly

80 85 90

gag cgt ggc ggc aaa gga tct aaa ggc tcc cag ggc ccc aaa ggc tcc 999

Glu Arg Gly Gly Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser

95 100 105 110

cgt ggt tcc cct ggg aag ccc ggc cct cag ggc ccc agt ggg gac cca 1047

Arg Gly Ser Pro Gly Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro

115 120 125

ggc ccc ccg ggc cca cca ggc aaa gag gga ctc ccc ggc cct cag ggc 1095
Gly Pro Pro Gly Pro Pro Gly Lys Glu Gly Leu Pro Gly Pro Gln Gly
130 135 140

cct cct ggc ttc cag gga ctt cag ggc acc gtt ggg gag cct ggg gtg 1143
Pro Pro Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val
145 150 155

cct gga cct cgg gga ctg cca ggc ttg cct ggg gta cca ggc atg cca 1191
Pro Gly Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro
160 165 170

ggc ccc aag ggc ccc ccc ggc cct cct ggc cca tca gga gcg gtg gtg 1239
Gly Pro Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Val Val
175 180 185 190

ccc ctg gcc ctg cag aat gag cca acc ccg gca ccg gag gac aat ggc 1287
Pro Leu Ala Leu Gln Asn Glu Pro Thr Pro Ala Pro Glu Asp Asn Gly
195 200 205

tgc ccg cct cac tgg aag aac ttc aca gac aaa tgc tac tat ttt tca 1335
Cys Pro Pro His Trp Lys Asn Phe Thr Asp Lys Cys Tyr Tyr Phe Ser
210 215 220

gtt gag aaa gaa att ttt gag gat gca aag ctt ttc tgt gaa gac aag 1383
Val Glu Lys Glu Ile Phe Glu Asp Ala Lys Leu Phe Cys Glu Asp Lys
225 230 235

tct tca cat ctt gtt ttc ata aac act aga gag gaa cag caa tgg ata 1431
Ser Ser His Leu Val Phe Ile Asn Thr Arg Glu Glu Gln Gln Trp Ile
240 245 250

aaa aaa cag atg gta ggg aga gag agc cac tgg atc ggc ctc aca gac 1479
Lys Lys Gln Met Val Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp
255 260 265 270

tca gag cgt gaa aat gaa tgg aag tgg ctg gat ggg aca tct cca gac 1527
Ser Glu Arg Glu Asn Glu Trp Lys Trp Leu Asp Gly Thr Ser Pro Asp

275 280 285

tac aaa aat tgg aaa gct gga cag ccg gat aac tgg ggt cat ggc cat 1575
Tyr Lys Asn Trp Lys Ala Gly Gln Pro Asp Asn Trp Gly His Gly His

290 295 300

ggg cca gga gaa gac tgt gct ggg ttg att tat gct ggg cag tgg aac 1623
Gly Pro Gly Glu Asp Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn

305 310 315

gat ttc caa tgt gaa gac gtc aat aac ttc att tgc gaa aaa gac agg 1671
Asp Phe Gln Cys Glu Asp Val Asn Asn Phe Ile Cys Glu Lys Asp Arg

320 325 330

gag aca gta ctg tca tct gca tta taacggactg tgatgggatc acatgagcaa 1725
Glu Thr Val Leu Ser Ser Ala Leu

335 340

attttcagct ctcaaaggca aaggacactc ctttctaatt gcatcacctt ctcatcagat 1785
tgaaaaaaaa aaaagcactg aaaaccaatt actgaaaaaa aattgacagc tagtgttttt 1845
taccatccgt cattacccaa agacttggga actaaaatgt tccccagggt gatatgctga 1905
ttttcattgt gcacatggac tgaatcacat agattctcct ccgtcagtaa ccgtgcgatt 1965
atacaaatta tgtcttccaa agtatggaac actccaatca gaaaaaggtt atcatcccg 2024

<210> 2
<211> 547
<212> PRT
<213> Homo Sapiens

<220>
<223> Deduced Amino Acid Sequence of Novel Collectin from Nucleotide Sequence.

<400> 2

Met Tyr Ser His Asn Val Val Ile Met Asn Leu Asn Asn Leu Asn Leu
1 5 10 15
Thr Gln Val Gln Gln Arg Asn Leu Ile Thr Asn Leu Gln Arg Ser Val
20 25 30
Asp Asp Thr Ser Gln Ala Ile Gln Arg Ile Lys Asn Asp Phe Gln Asn
35 40 45
Leu Gln Gln Val Phe Leu Gln Ala Lys Lys Asp Thr Asp Trp Leu Lys
50 55 60
Glu Lys Val Gln Ser Leu Gln Thr Leu Ala Ala Asn Asn Ser Ala Leu
65 70 75 80
Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser Gln Leu Asn
85 90 95
Ser Phe Thr Gly Gln Met Glu Asn Ile Thr Thr Ile Ser Gln Ala Asn
100 105 110
Glu Gln Asn Leu Lys Asp Leu Gln Asp Leu His Lys Asp Ala Glu Asn
115 120 125
Arg Thr Ala Ile Lys Phe Asn Gln Leu Glu Glu Arg Phe Gln Leu Phe
130 135 140
Glu Thr Asp Ile Val Asn Ile Ile Ser Asn Ile Ser Tyr Thr Ala His
145 150 155 160
His Leu Arg Thr Leu Thr Ser Asn Leu Asn Glu Val Arg Thr Thr Cys
165 170 175
Thr Asp Thr Leu Thr Lys His Thr Asp Asp Leu Thr Ser Leu Asn Asn
180 185 190
Thr Leu Ala Asn Ile Arg Leu Asp Ser Val Ser Leu Arg Met Gln Gln
195 200 205
Asp Leu Met Arg Ser Arg Leu Asp Thr Glu Val Ala Asn Leu Ser Val
210 215 220
Ile Met Glu Glu Met Lys Leu Val Asp Ser Lys His Gly Gln Leu Ile

225 230 235 240

Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly Pro Arg Gly Pro Arg

245 250 255

Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro Thr Gly Asn Lys Gly

260 265 270

Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro Gly Pro Ala Gly Glu

275 280 285

Arg Gly Pro Ile Gly Pro Ala Gly Pro Pro Gly Glu Arg Gly Gly Lys

290 295 300

Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser Arg Gly Ser Pro Gly

305 310 315 320

Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro Gly Pro Pro Gly Pro

325 330 335

Pro Gly Lys Glu Gly Leu Pro Gly Pro Gln Gly Pro Pro Gly Phe Gln

340 345 350

Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val Pro Gly Pro Arg Gly

355 360 365

Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro Gly Pro Lys Gly Pro

370 375 380

Pro Gly Pro Pro Gly Pro Ser Gly Ala Val Val Pro Leu Ala Leu Gln

385 390 395 400

Asn Glu Pro Thr Pro Ala Pro Glu Asp Asn Gly Cys Pro Pro His Trp

405 410 415

Lys Asn Phe Thr Asp Lys Cys Tyr Tyr Phe Ser Val Glu Lys Glu Ile

420 425 430

Phe Glu Asp Ala Lys Leu Phe Cys Glu Asp Lys Ser Ser His Leu Val

435 440 445

Phe Ile Asn Thr Arg Glu Glu Gln Gln Trp Ile Lys Lys Gln Met Val

450 455 460

Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp Ser Glu Arg Glu Asn
465 470 475 480
Glu Trp Lys Trp Leu Asp Gly Thr Ser Pro Asp Tyr Lys Asn Trp Lys
485 490 495
Ala Gly Gln Pro Asp Asn Trp Gly His Gly His Gly Pro Gly Glu Asp
500 505 510
Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn Asp Phe Gln Cys Glu
515 520 525
Asp Val Asn Asn Phe Ile Cys Glu Lys Asp Arg Glu Thr Val Leu Ser
530 535 540
Ser Ala Leu
545

<210> 3
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Modified Consensus Sequence of collectins Hybridizable with Novel Collectin.

<400> 3
Glu Lys Cys Val Glu Met Tyr Thr Asp Gly Lys Trp Asn Asp Arg Asn
1 5 10 15
Cys Leu Gln Ser Arg Leu Ala Ile Cys Glu Phe
20 25

<210> 4

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Reverse Primer for Screening a Novel Collectin.

<400> 4

caatctgatg agaaggtgat g 21

<210> 5

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Forward Primer for Screening a Novel Collectin.

<400> 5

acgaggggct ggatgggaca t 21

<210> 6

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Consensus sequence of three collectins which were reported heretofore.

<400> 6

Glu Asp Cys Val Leu Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro
1 5 10 15

Cys Ser Thr Ser His Leu Ala Val Cys Glu Phe
20 25

<210> 7

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> M13 Universal Primer Sequence for Sequencing.

<400> 7

cgacgttgta aaacgacggc cagt 24

<210> 8

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> M13 Reverse Primer Sequence for Sequencing.

<400> 8

caggaaaca gctatgac 17

<210> 9

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a λgt11 Reverse Primer for Sequencing.

<400> 9

ttgacaccag accaactggt aatg 24

<210> 10

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a λgt11 Forward Primer for Sequencing.

<400> 10

ggtggcgacg actcctggag cccg 24

<210> 11

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Primer for Screening a Novel Collectin.

<400> 11

cgtgaaaatg aatggaagtg g 21

<210> 12

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Primer for Screening a Novel Collectin.

<400> 12

ttttatccat tgctgttcct c 21

<210> 13

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Primer for Sequencing a Novel Collectin.

<400> 13

ctggcagtcc ccgaggtcca g 21

<210> 14

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Primer for Sequencing a Novel Collectin.

<400> 14

gctggtcccc ccggagagcg t 21

<210> 15

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a 1RC2 Primer for Cap Site Sequencing.

<400> 15

caaggtacgc cacagcgtat g 21

<210> 16

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Synthetic TGP1 Primer for Cap Site Sequencing.

<400> 16

tcttcagttt ccctaatccc 20

<210> 17

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a 2RC2 Primer for Cap Site Sequencing.

<400> 17

gtacgccaca gcgtatgatg c 21

<210> 18

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Synthetic TGP2 Primer for Cap Site Sequencing.

<400> 18

cattcttgac aaacttcata g 21

<210> 19

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Primer for Screening a Novel Collectin.

<400> 19

gaagacaagt cttcaactct tg 22

<210> 20

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Primer for Screening a Novel Collectin.

<400> 20

ctctgagtct gtgaggccga tc 22

<210> 21

<211> 111

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Probe for Screening a Novel Collectin.

<400> 21

gaagacaagt cttcacatct tgttttcata aacactagag aggaacagca atggataaaa 60

aaacagatgg tagggagaga gagccactgg atcggcctca cagactcaga g 111

<210> 22

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Forward Primer for Screening a Novel Collectin.

<400> 22

gtgcccctgg ccctgcagaa tg 22

<210> 23

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Reverse Primer for Screening a Novel Collectin.

<400> 23

gcatatcacc ctggggaaca ttttag 26

<210> 24

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Sense Primer for Screening β-Actin.

<400> 24
caagagatgg ccacggctgc t 21

<210> 25
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Sequence of an Antisense Primer for Screening β-Actin.

<400> 25
tccttctgca tcctgtcggc a 21

<210> 26
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Sequence of a Sense Primer for Amplifying the Novel Collectin.

<400> 26
aaggaaaaaa gcggccgcat gcaacaagat ttgatgagg 39

<210> 27
<211> 29
<212> DNA
<213> Artificial Sequence

<220>

<223> Sequence of a Reverse Primer for Amplifying the Novel Collectin.

<400> 27

gctctagatt ataatgcaga tgacagtac 29

<210> 28

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Sense Primer for Amplifying the Nockout Gene.

<400> 28

atgcaacaag atttgatgag g 21

<210> 29

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Sense Primer for Amplifying the Nockout Gene.

<400> 29

cctacccggt agaattgacc 20